Insofar as the applicant is aware, there exists no hole saw boss including a threaded member adapted to accommodate two hole saws of the same or different diameter threaded bore.

SUMMARY OF THE INVENTION

Therefore, in one form of the invention there is proposed an improved hole saw boss including:

a threaded member incorporating a first threaded portion adapted to engage a threaded bore of a first hole saw and a second threaded portion adapted to engage a threaded bore of a second hole saw, wherein the second threaded portion is of a stepped down diameter to accommodate a hole saw having a threaded bore diameter smaller than the first hole saw.

In preference said second hole saw cutting diameter is smaller than said first hole saw cutting diameter.

In preference said boss includes a base member to which the threaded member is connected.

In preference said first and second threaded portion diameters correspondingly engage with commonly available hole saw threaded bore diameters.

In preference at least one threaded portion is of a length capable of accommodating more than one hole saw of different cutting diameters.

In preference said base member and said threaded member include a central aperture adapted to allow a drill bit to fit there through.

In preference said boss includes a connection means which is configured to engage a mandrel.

In preference said second hole saw is chosen to fit snugly within an existing aperture of a work piece.

In preference said first hole saw is adapted to drill a hole larger than the existing hole into said work piece.

Preferably the cutting surface of said second hole saw extends longitudinally beyond the cutting surface of said first hole saw.

Preferably said cutting surface of said second hole saw contacts the planar face of said work piece before said cutting surface of said first hole saw.

In a further form of the invention there is proposed an improved hole saw boss including:

- a threaded member adapted to accommodate at least two hole saws of different cutting diameters;
 - a base member having at least one notch; and at least one drive pin, said drive pin configured to engage both said at least one notch on said base member and an existing aperture on at least one of said hole saws.
- In preference in said at least one drive pin is magnetised to restrain said drive pin within said aperture on said hole saw.

BRIEF DESCRIPTION OF THE DRAWINGS

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The accompanying drawings, which are incorporated in and constitute a part of this specification, illustrate several implementations of the invention and, together with the description, serve to explain the advantages and principles of the invention. In the drawings,

- Figure 1 is an exploded perspective view of a hole saw assembly embodying the present invention and including a single threaded member;
- Figure 2 is a perspective view of the hole saw assembly of Figure 1 applied to a work piece;
- 20 Figure 3 is a perspective view of the double-diameter boss of the present invention including a mandrel connection means;
 - Figure 4 is a side view of the hole saw boss of Figure 3;
 - Figure 5 is a top view of the hole saw boss of Figure 3;